## WHAT IS CLAIMED IS:

1. A solid-electrolyte battery comprising:

an elongated positive electrode;

an elongated negative electrode disposed opposite to said positive electrode; and a solid electrolyte layer provided for the surface of at least either of said positive electrode or said negative electrode, wherein

said positive electrode and said negative electrode are laminated such that the surfaces on which said solid electrolyte layers have been formed are disposed opposite to each other and wound in the lengthwise direction of said positive electrode and said negative electrode, and

said solid-electrolyte layer formed on said positive electrode and said solid-electrolyte layer formed on said negative electrode are integrated with each other so as to be formed into a continuous shape.

- 2. A solid-electrolyte battery according to claim 1, wherein said solid-electrolyte layer contains swelling solvent and gelled.
- 3. A solid-electrolyte battery according to claim 1, wherein said solid-electrolyte layer disposed between said positive electrode and said negative electrode is formed into a single layer.

4. A solid-electrolyte battery comprising:

an elongated positive electrode;

a positive electrode terminal welded to said positive electrode;

an elongated negative electrode disposed opposite to said positive electrode;

a negative electrode terminal welded to said negative electrode; and

an solid-electrolyte layer provided for the surface of at least said positive electrode and said negative electrode wherein

said positive electrode and said negative electrode are laminated such that the surfaces on which said solid-electrolyte layers were formed are disposed opposite to each other and wound in the lengthwise direction,

said solid-electrolyte layer formed on said positive electrode and said solid-electrolyte layer formed on said negative electrode are integrated with each other so as to be formed into a continuous shape, and

said positive electrode, said negative electrode and said solid-electrolyte layer are packaged in a packaging film.

- 5. A solid-electrolyte battery according to claim 4, wherein said solid-electrolyte layer contains swelling solvent and gelled.
- 6. A solid-electrolyte battery according to claim 4, wherein said solid-electrolyte layer disposed between said positive electrode and said negative

electrode is formed into a single layer.

7. A method of manufacturing a solid-electrolyte battery comprising:

a first electrolyte layer forming step for forming a solid-electrolyte layer on a positive electrode;

a second electrolyte layer forming step for forming a solid-electrolyte layer on a negative electrode;

a winding step for laminating said positive electrode having said solid-electrolyte layer formed thereon and said negative electrode having said solid-electrolyte layer formed thereon such that the surfaces on which said solid-electrolyte layers have been formed are disposed opposite to each other and winding said positive electrode and said negative electrode to form wound electrodes; and

a heat treatment step for subjecting said wound electrodes obtained in said winding step to heat treatment so that said solid-electrolyte layer formed on said positive electrode and said solid-electrolyte layer formed on said negative electrode are integrated with each other.

8. A method of manufacturing a solid-electrolyte battery according to claim 7, wherein said solid-electrolyte layer contains swelling solvent and gelled.